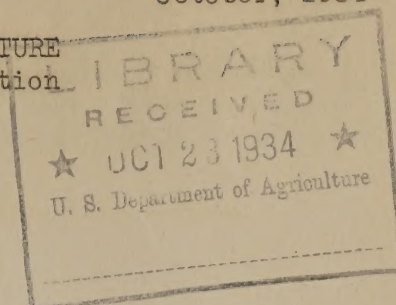


October, 1934

1.94  
Ad 4nd

UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Adjustment Administration  
Washington, D.C.



-----

NORTH DAKOTA CROP RETURNS  
HELPED BY ADJUSTMENT PROGRAMS

Benefits, direct and indirect, which aggregate \$93,000,000 have been and will be realized by North Dakota farmers as a result of agricultural adjustment programs and other recovery measures that have been launched since the spring of 1933, according to recent estimates.

Direct benefits include rental and benefit payments, Government drought-relief purchases, and emergency hog buying operations. Indirect benefits include advances in price that have partially compensated North Dakota producers for tremendous losses in production that are due to crop failure.

Rental and benefits to the amount of \$33,074,000 were earned by North Dakota producers. Of this total, \$10,292,996 had been paid on August 1. A large portion of the balance adds to 1934 farm income. Other benefits made possible by the Agricultural Adjustment programs were the receipt of \$1,015,000 for 238,961 hogs sold under the emergency hog buying program, and \$7,961,075 received by producers up to September 25 through the Government purchase of cattle for which feed supplies were inadequate.

Indirect benefits, brought about through price advances that have taken place since the inception of the adjustment programs and other recovery measures, are estimated at \$33,278,000, and represent the effect of advancing prices in spite of smaller production.

WHEAT

Direct Benefits Are \$29,447,000

Direct benefits to wheat growers of North Dakota through the adjustment program amount to \$29,447,000 in rental and parity payments to farmers who signed contracts for acreage control. Of this total, benefits credited to 1933 were \$14,475,000, and 1934 benefits were \$14,972,000, with 102,839 North Dakota farmers participating in the wheat adjustment program.

The 1932 wheat crop amounted to 110,396,000 bushels, and sold at 36 cents per bushel, to yield \$39,743,000 in farm value. The 1933 crop of 65,386,000 bushels had farm value of \$43,809,000, because the price of wheat increased from 36 cents to 67 cents per bushel. The 1934 crop, estimated to be only 21,418,000 bushels, if prices during August are maintained, will have a farm value of \$21,203,820. These values are exclusive of benefit payments.

Thus increases in price compensated, in part, for loss in production. Adding rental and benefit payments brings the farm value of the 1933 crop to \$58,284,000, and the potential value of the 1934 crop to \$36,175,000. In other words, the 1933



THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF CHEMISTRY  
RESEARCH REPORT

THE REACTION OF  
HYDROGEN PEROXIDE WITH  
SODIUM HYDROGEN SULFATE

The reaction of hydrogen peroxide with sodium hydrogen sulfate has been studied in the presence of various catalysts. The reaction is exothermic and proceeds rapidly at room temperature. The rate of reaction is increased by the addition of certain metal ions, particularly iron and copper. The reaction is inhibited by the addition of certain organic compounds, particularly alcohols and amines.

The reaction is first order with respect to hydrogen peroxide and first order with respect to sodium hydrogen sulfate. The reaction is zero order with respect to the catalyst. The activation energy of the reaction is 15.5 kcal/mole. The reaction is catalyzed by iron(II) ions, copper(II) ions, and cerium(IV) ions.

The reaction is inhibited by methanol, ethanol, and isopropanol. The reaction is also inhibited by dimethylamine, triethylamine, and diethylamine. The reaction is not catalyzed by cobalt(II) ions, nickel(II) ions, or manganese(II) ions. The reaction is not inhibited by sodium chloride, sodium sulfate, or sodium bisulfate.

The reaction is catalyzed by iron(II) ions in the presence of ascorbic acid. The reaction is also catalyzed by iron(II) ions in the presence of hydroxyacetone. The reaction is not catalyzed by iron(II) ions in the presence of hydroxyacetone in the absence of ascorbic acid.

The reaction is catalyzed by iron(II) ions in the presence of hydroxyacetone and ascorbic acid. The reaction is also catalyzed by iron(II) ions in the presence of hydroxyacetone and ascorbic acid in the absence of sodium hydrogen sulfate.

The reaction is catalyzed by iron(II) ions in the presence of hydroxyacetone and ascorbic acid. The reaction is also catalyzed by iron(II) ions in the presence of hydroxyacetone and ascorbic acid in the absence of sodium hydrogen sulfate. The reaction is not catalyzed by iron(II) ions in the presence of hydroxyacetone and ascorbic acid in the absence of sodium hydrogen sulfate.

The reaction is catalyzed by iron(II) ions in the presence of hydroxyacetone and ascorbic acid. The reaction is also catalyzed by iron(II) ions in the presence of hydroxyacetone and ascorbic acid in the absence of sodium hydrogen sulfate. The reaction is not catalyzed by iron(II) ions in the presence of hydroxyacetone and ascorbic acid in the absence of sodium hydrogen sulfate.

The reaction is catalyzed by iron(II) ions in the presence of hydroxyacetone and ascorbic acid. The reaction is also catalyzed by iron(II) ions in the presence of hydroxyacetone and ascorbic acid in the absence of sodium hydrogen sulfate. The reaction is not catalyzed by iron(II) ions in the presence of hydroxyacetone and ascorbic acid in the absence of sodium hydrogen sulfate.



crop was 42 percent less in volume than the 1932 crop, and yet, with benefits, it returned to producers a value about 46 percent larger; the 1934 crop was about 75 percent less than the 1932 crop, and yet, with benefits, it may return to producers a potential value only 8 percent less.

## CORN AND HOGS

### Direct Benefits Are \$4,281,638.97

Direct benefits earned by North Dakota farmers under corn and hog contracts adds to value of these products for the 1934 season, \$4,281,638.97. This amount includes rental and benefit payments to 19,860 signers of corn and hog contracts, and receipts from cash purchases of hogs by the Government in its adjustment program. Benefits on corn contracts are \$1,442,000, and hog benefits, \$2,185,000. Receipts from purchases of hogs amounted to \$1,014,638.97, for 238,961 head of hogs being bought by the Government.

The 1932 corn crop of 26,676,000 bushels had farm value of \$7,203,000, at a farm price of 27 cents per bushel. In 1933, the rise in price to 35 cents per bushel, due in part at least to the corn loan policy of the Agricultural Adjustment Administration, held the farm value to \$7,004,000, despite the fact that the crop declined in volume to 20,010,000 bushels. In 1934 the crop is placed at only 8,166,000 bushels, but if the August farm price of 71 cents per bushel is maintained will have a farm value of \$7,229,000, including applicable benefit payments. Thus, by virtue of rising prices combined with benefit payments, the value of the 1933 and the 1934 crops have been maintained at practically the 1932 level, despite a decrease in production of 24 percent the first year, and about 69 percent the second year.

Hog production returned growers \$6,128,000 in 1932, as compared with \$6,500,000 in 1933, despite a slump in production from 208,000,000 pounds to 169,000,000 pounds. A part of the 1933 income was the \$1,015,000 received by producers in the emergency purchasing program. As a result of this program, and nation-wide adjustment, surplus hog supplies have been removed, and considerably higher prices are in prospect for 1934. To these will be added \$2,185,000 in hog rental and benefit payments for North Dakota producers.

## OATS, BARLEY, RYE

### Three 1933 Crops Gain \$7,755,812

Indirect gains resulting from advances in the prices of oats, barley and rye, on North Dakota farms offset by \$7,755,812 the effect of decreased production on these crops which amounted to an average of nearly 60 percent. The price gain on the crop of oats was \$3,276,572, brought about by an advance from 9 cents to 24 cents per bushel. The advance in the price of barley was from 14 cents to 33 cents per bushel, and the gain in crop value because of this advance was \$3,477,000. Rye prices advanced from 22 cents to 49 cents, increasing the value of the crop by \$1,002,240.





## HAY

1933 Price Gain Is \$1,752,300

The average price of hay in North Dakota, from 1932 to 1933, advanced from \$4.00 to \$4.90 per ton, and this increase in price on the 1933 crop added \$1,752,300 to its value, equalizing about half the loss in volume.

1934 Price Gain Is Larger

The 1934 price gain on hay production indicates a \$3,700,000 difference in crop value as compared with the value of the crop in 1932. The price advanced from \$4.00 per ton to \$11.30. The difference in value represented a saving in crop value of that amount, as 1934 production decreased approximately 80 percent from that of 1932.

## POTATOES

1933 Price Gain

The potato crop of 1933 showed considerable increases both in gross value of the crop, and in net gains due to the advance in prices. The size of the crop was off by about 10 percent, but the price advance from 23 cents to 55 cents per bushel added \$3,032,000 to the gross value.

## AAA BENEFITS IN NORTH DAKOTA

## ESTIMATED BENEFITS TO BE PAID

<u>Commodity</u>	<u>Number of Signers</u>	<u>1933 Program</u>	<u>1934 Program</u>	<u>Total</u>
Wheat	102,839	\$ 14,475,000	\$ 14,972,000	\$ 29,447,000
Corn )	19,860		\$ 1,442,000 )	\$ 3,627,000
)			)	
Hogs )			\$ 2,185,000 )	
		<u>Total All Commodities</u>		<u>\$ 33,074,000</u>

## OTHER BENEFITS

Hog buying:	(238,961 hogs)	\$ 1,014,638.97
Cattle buying:	(761,177 cattle)	(purchase payments \$ 7,155,713. (benefit payments \$ 3,744,296.
Sheep buying:	(2,326 sheep)	



RECEIVED

TO THE HONORABLE SECRETARY OF THE INTERIOR  
WASHINGTON, D. C.

DEAR SIR:

I have the honor to acknowledge the receipt of your letter of the 10th inst. in relation to the matter of the

REPLY

of the 10th inst. in relation to the matter of the

REPLY

TO THE HONORABLE SECRETARY OF THE INTERIOR

TO THE HONORABLE SECRETARY OF THE INTERIOR  
WASHINGTON, D. C.

I have the honor to acknowledge the receipt of your letter of the 10th inst. in relation to the matter of the

REPLY

TO THE HONORABLE SECRETARY OF THE INTERIOR  
WASHINGTON, D. C.

I have the honor to acknowledge the receipt of your letter of the 10th inst. in relation to the matter of the